

REASON

- **The AAR map program used with TWGSS/PGS provides a tool to evaluate training exercises and individual crew performance. To be able to extract information required to conduct an AAR, the instructor must be able to prepare the AAR and operate the AAR map program.**

TRAINING OBJECTIVE

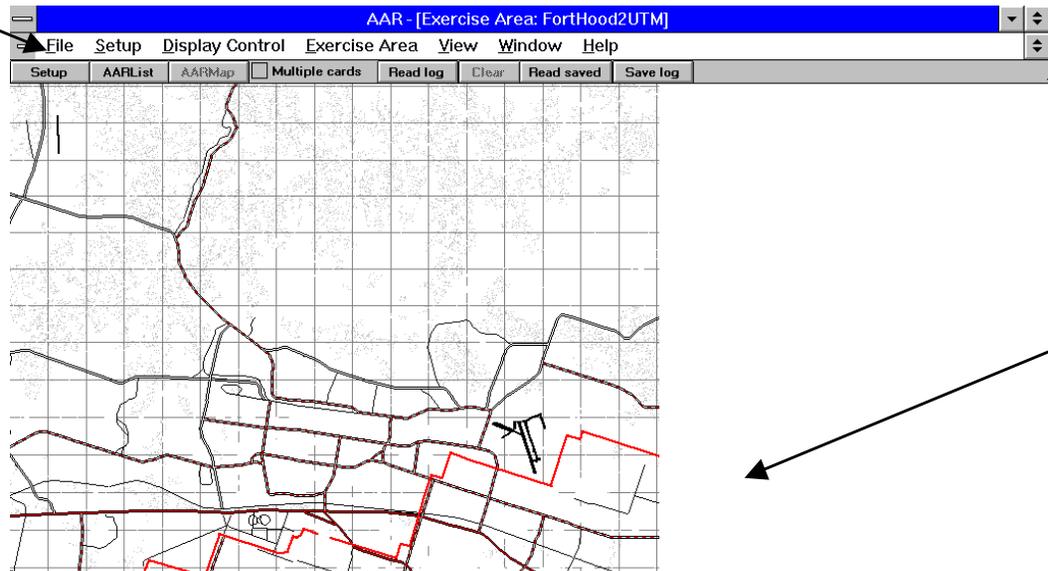
In a classroom environment, given a TDRS computer unit and TM 9-6920-711-12&P-1, you will perform the following:

- Operate AAR map controls and indicators.**
- Create a new exercise.**
- Change an existing exercise.**
- Evaluate a training exercise using AAR map.**
- Create a grid map exercise.**

AAR MAP MAIN MENU

menu bar

command buttons



presentation area

exercise control toolbar

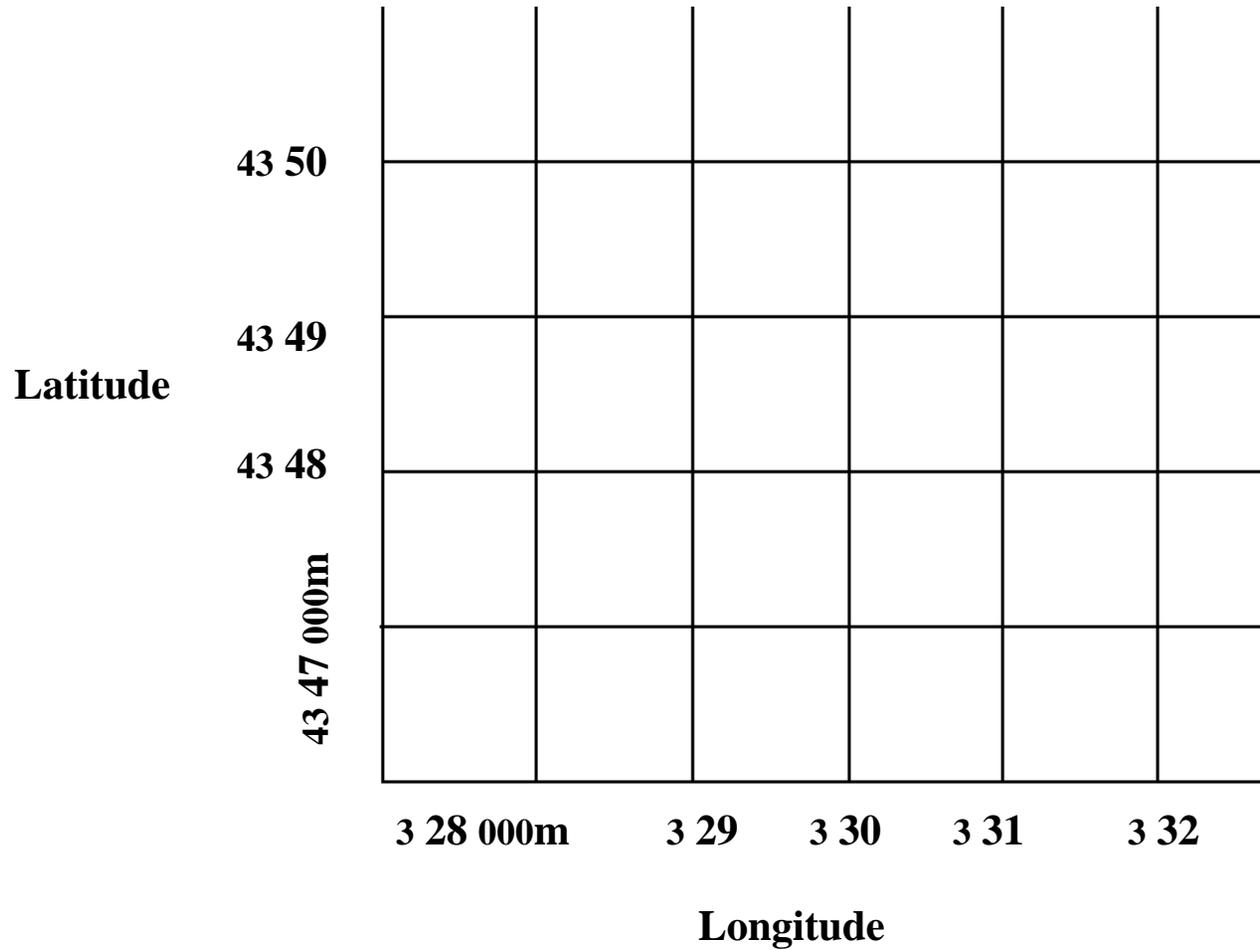
TERMINOLOGY

- **Map** - A scanned file of a Government-approved map downloaded into the computer.
- **Conversion Parameters** - Map, location, and time information used for transferring training exercise data to correct map positions.
- **ExerciseArea** - A map with all conversion parameters entered into the database.
- **Chart** - A paper copy of a map representing the training area.

TARGET POSITION DATA

- **The determined target positions must be in universal transverse mercator (UTM) format with values in meters.**

GRID COORDINATES



EXAMPLE OF GRID COORDINATE

- **Format:**
 - **LATITUDE = XX XX XXX meters**
 - **LONGITUDE = XX XX XXX meters**
- **Example (Fort Knox):**
 - **LATITUDE = 4199000 meters**
 - **LONGITUDE = 0592000 meters**

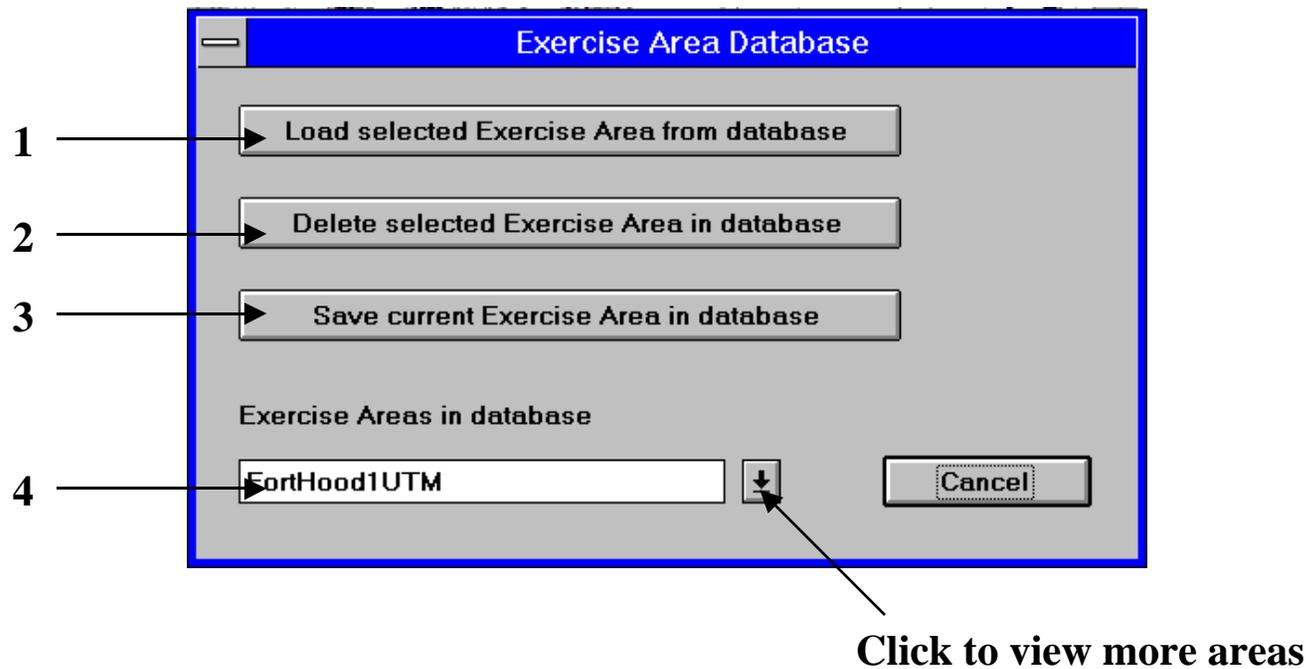
Note.

The first two digits are determined at lower left corner of the chart.

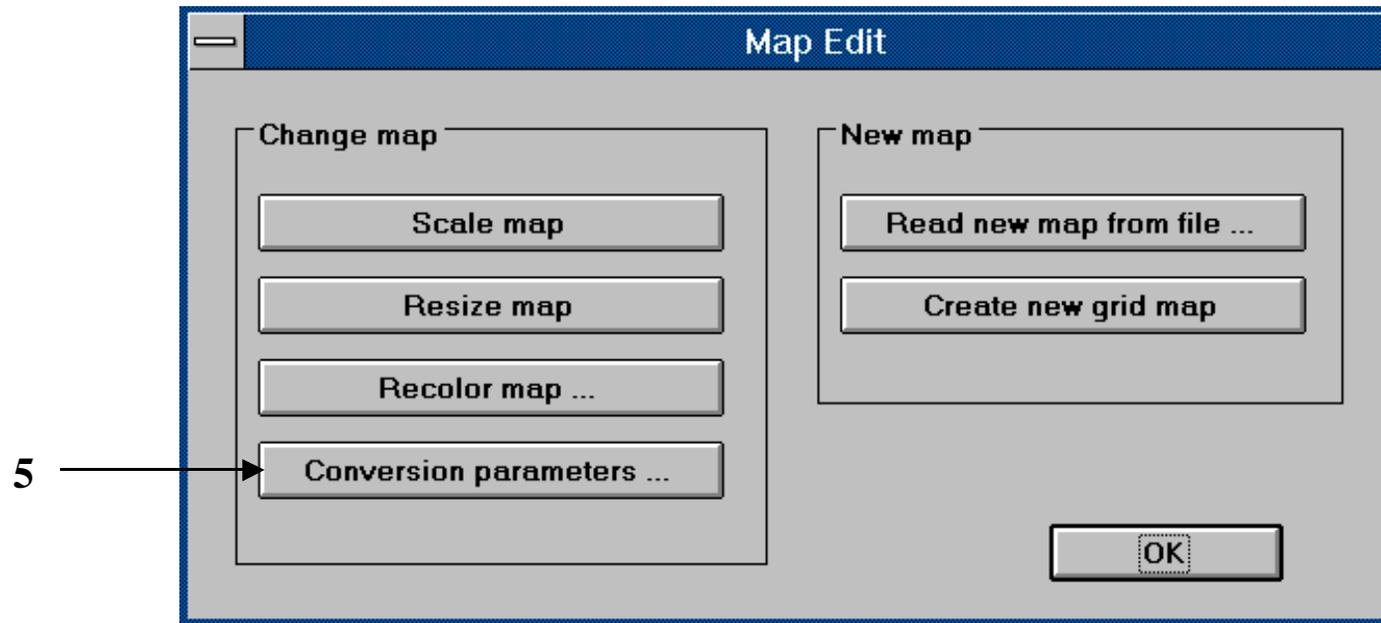
CREATING AN EXERCISE

- **Create/edit the exercise area.**
- **Collect source data about targets and other training area information.**
- **Create exercise (add targets/battle positions).**

EXERCISE AREA DATA BASE MENU



EDIT MAP MENU



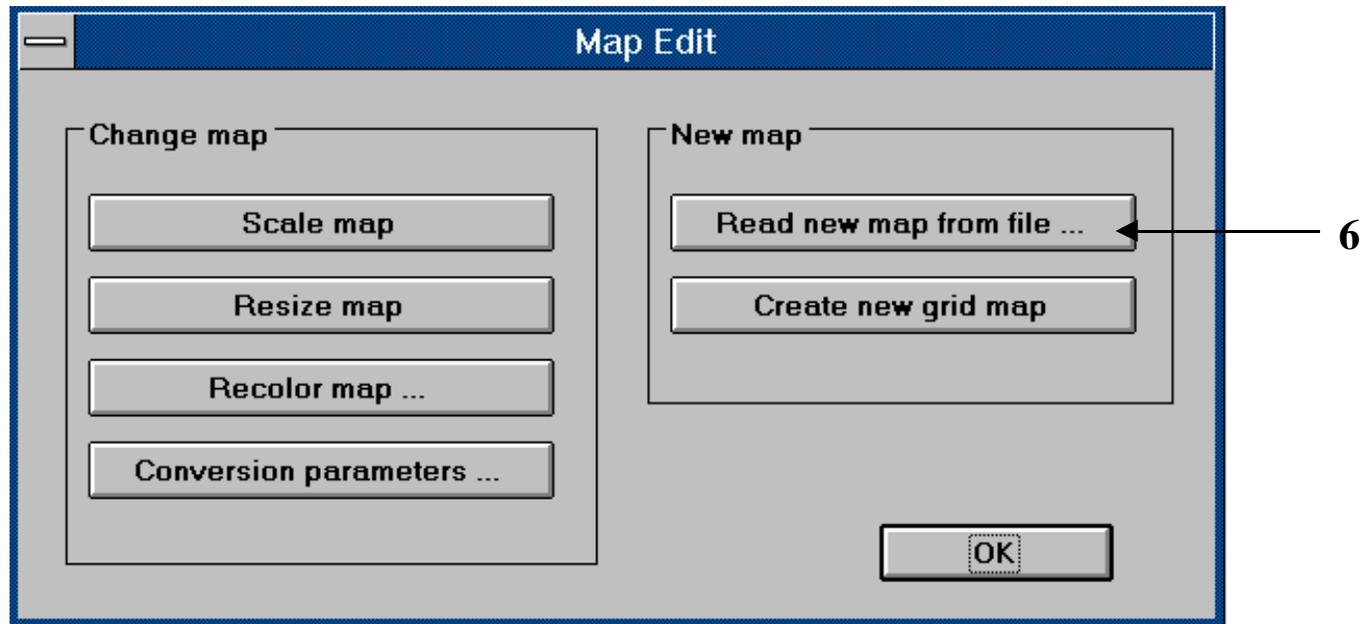
CONVERSION PARAMETERS

Log to map conversion.

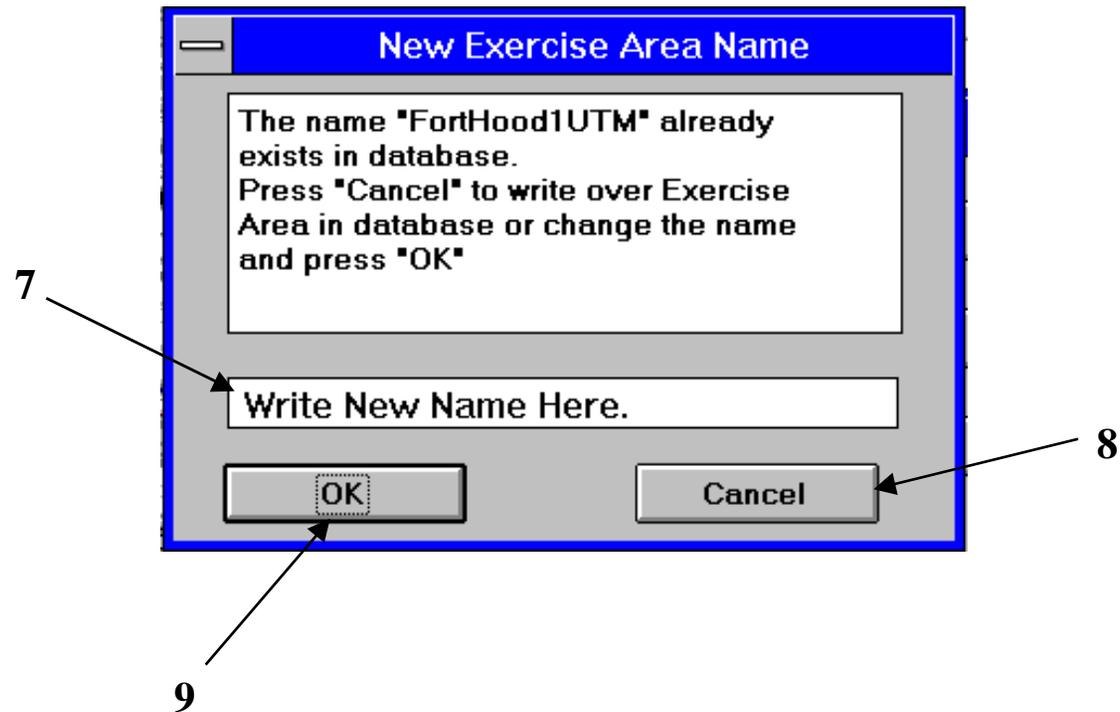
WGS84 to Local Geodetic System		Local Geodetic System reference ellipsoid	
X translation (m) :	<input type="text" value="8."/>	SemimajorAxis, a (m) :	<input type="text" value="6378206.4"/>
Y translation (m) :	<input type="text" value="-159."/>	SemiminorAxis, b (m) :	<input type="text" value="6356583.8"/>
Z translation (m) :	<input type="text" value="-175."/>	Local Geodetic System to Plane	
X rotation (rad) :	<input type="text" value="0."/>	Longitude of origin:	<input type="text" value="-1.72787596"/>
Y rotation (rad) :	<input type="text" value="0."/>		
Z rotation (rad) :	<input type="text" value="0."/>		

OK

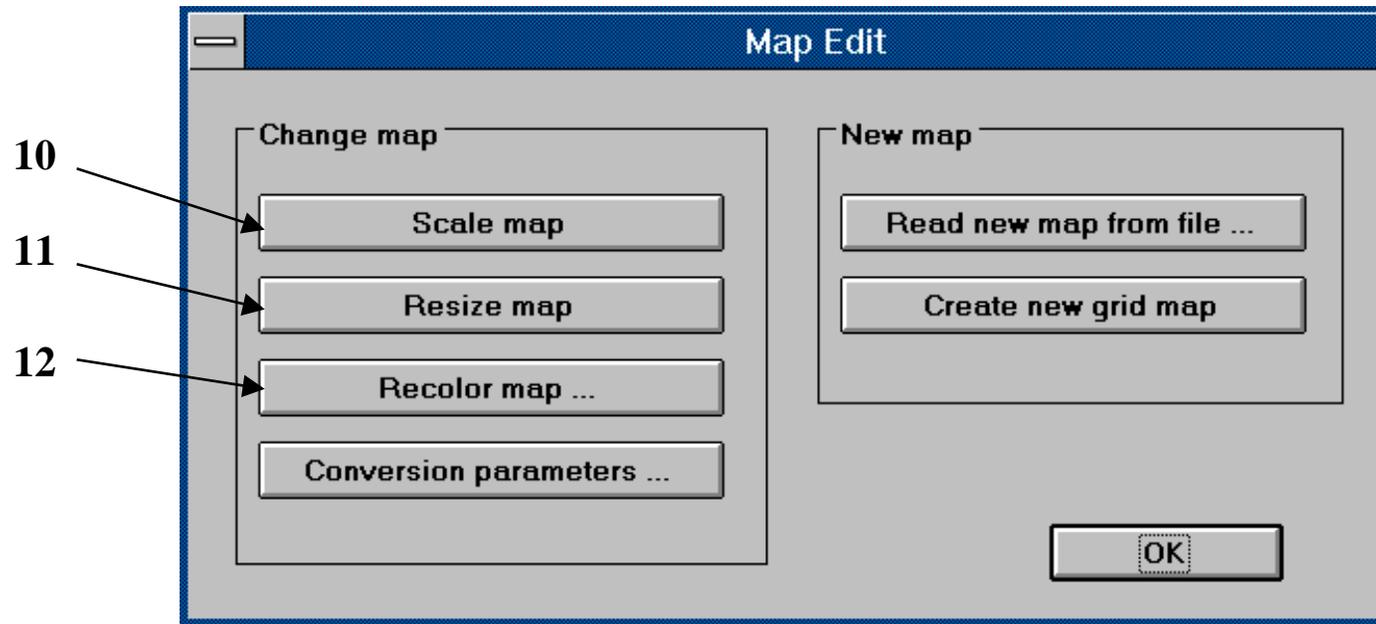
DOWNLOADING NEW MAP



SAVE EXERCISE AREA



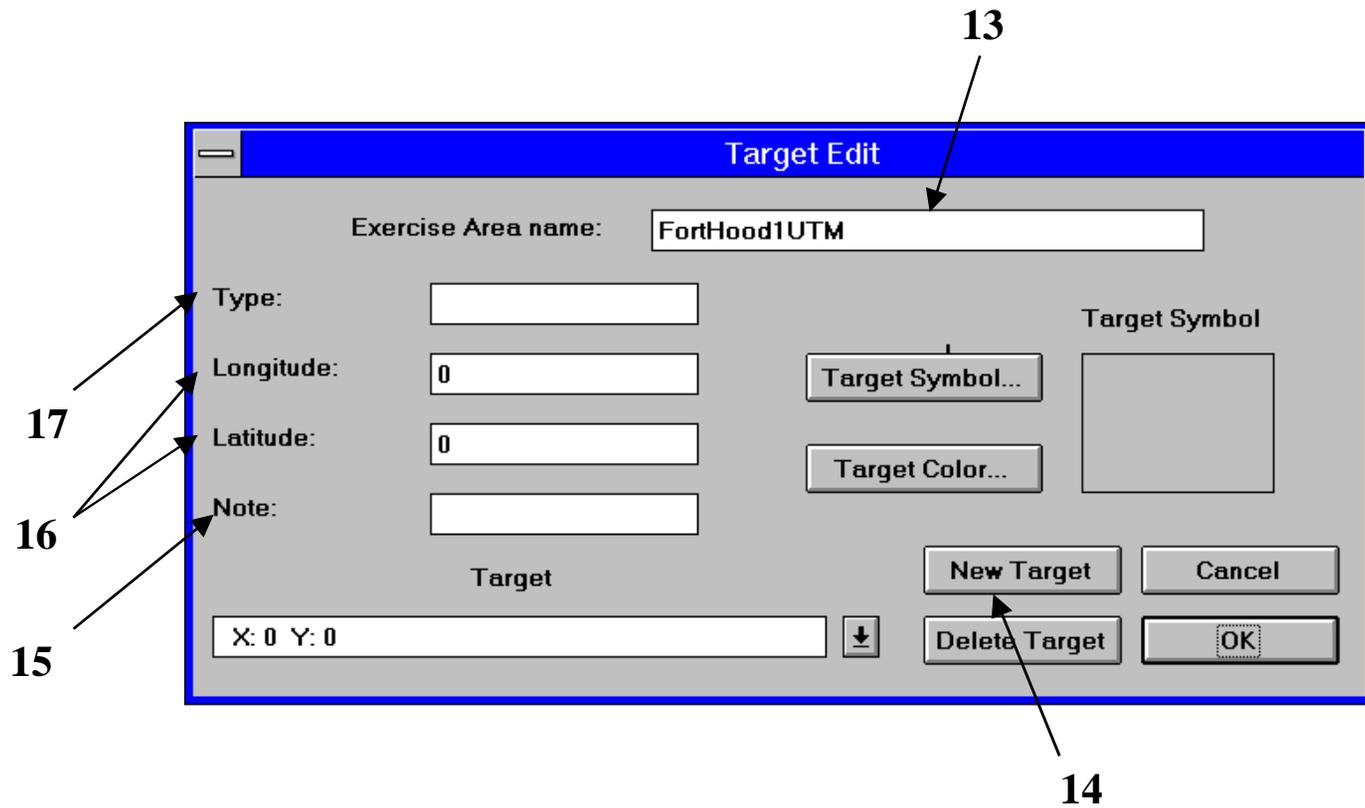
MAP EDIT



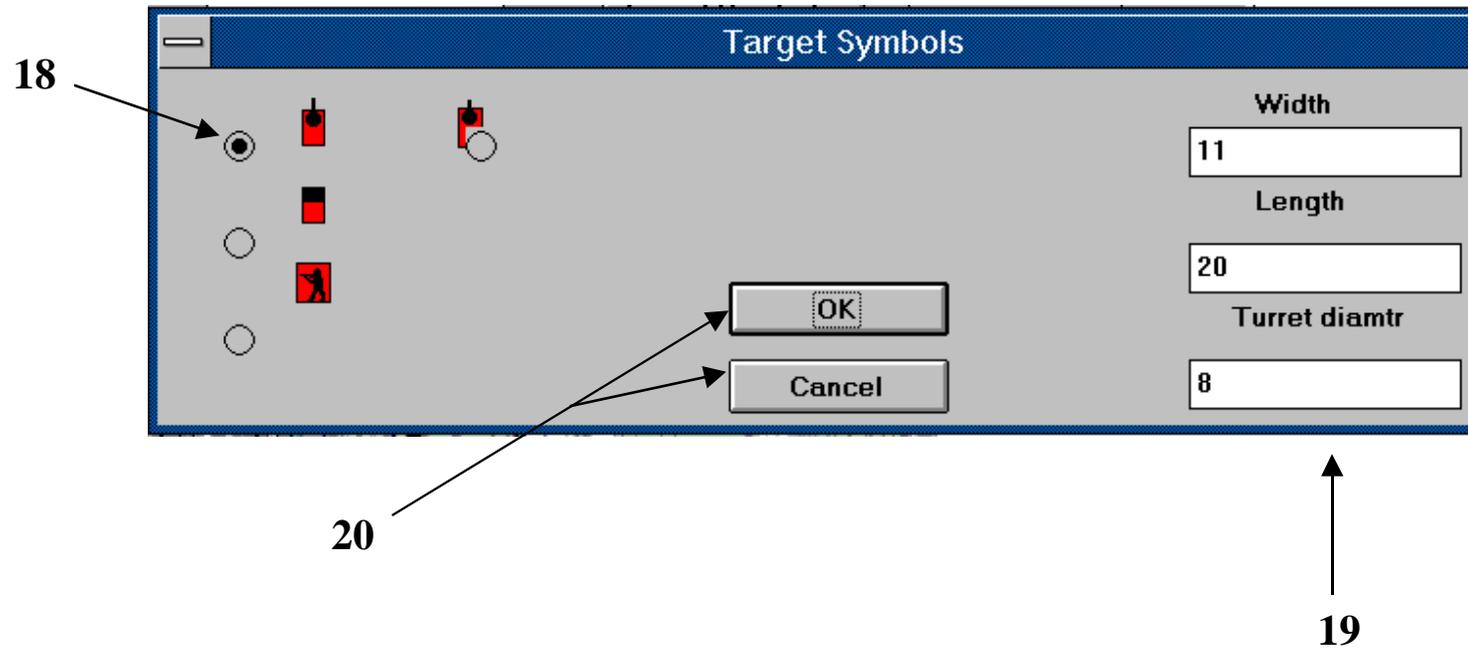
PANEL GUNNERY SOURCE DATA

- **Inspect target positions (target pits).**
- **Determine target positions.**
- **Determine exercise area between battle positions and targets.**
- **Determine position of battle positions.**

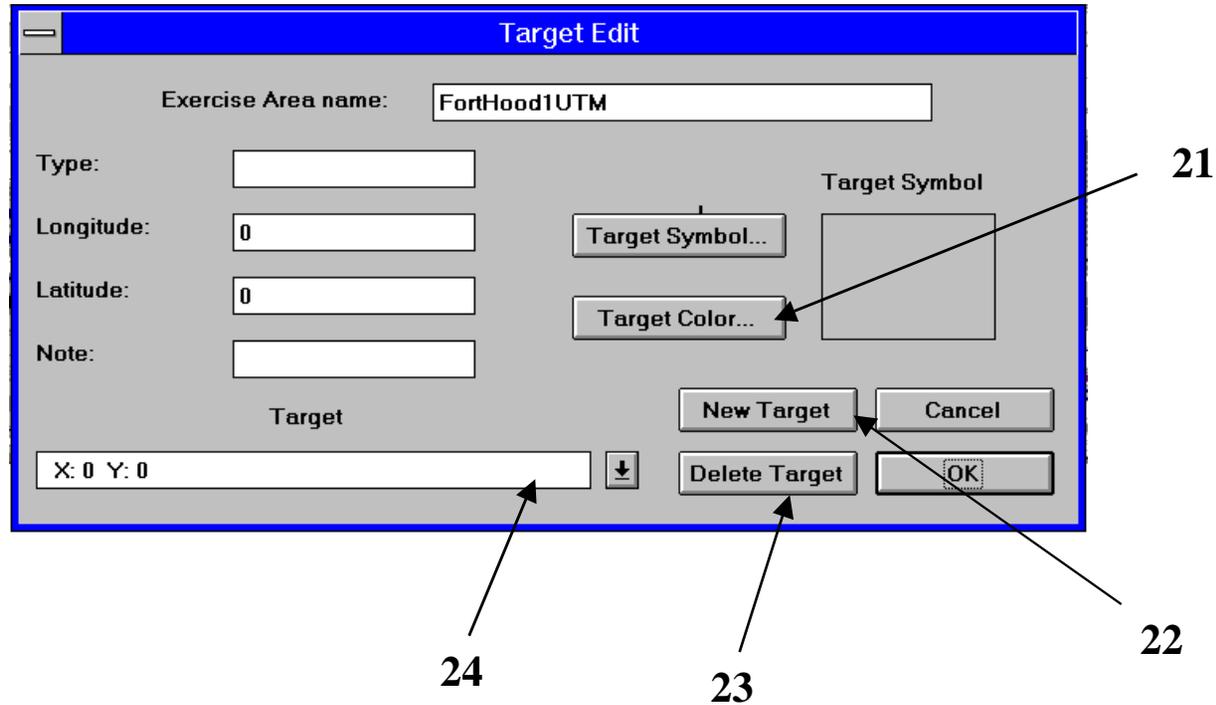
NEW TARGETS



TARGET SYMBOLS



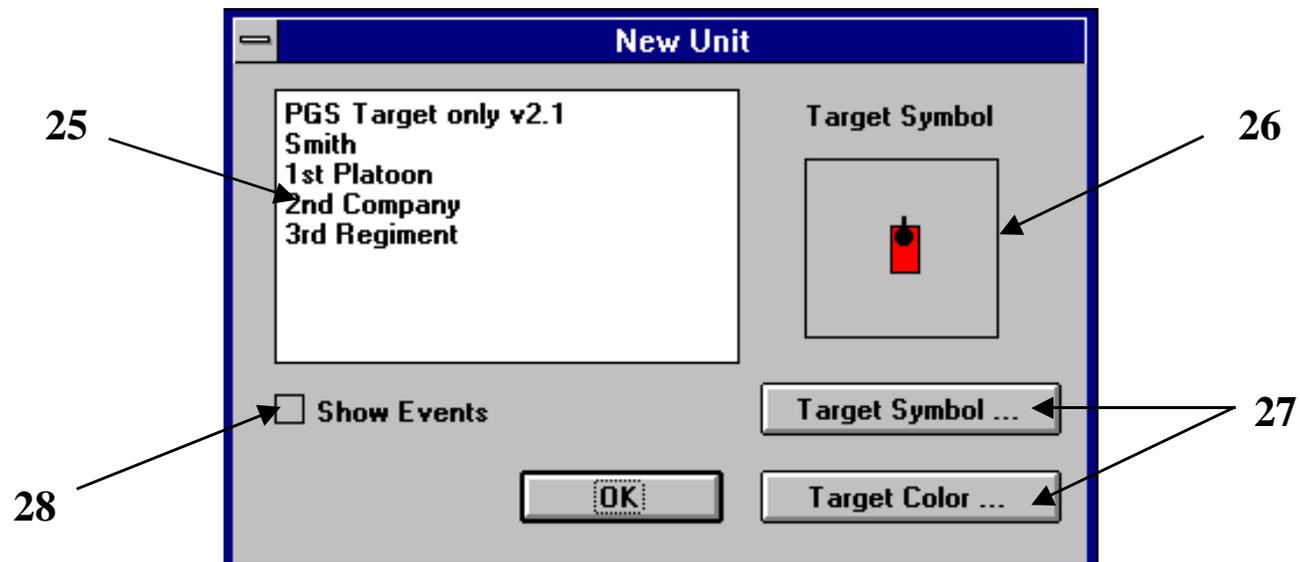
TARGET DATABASE



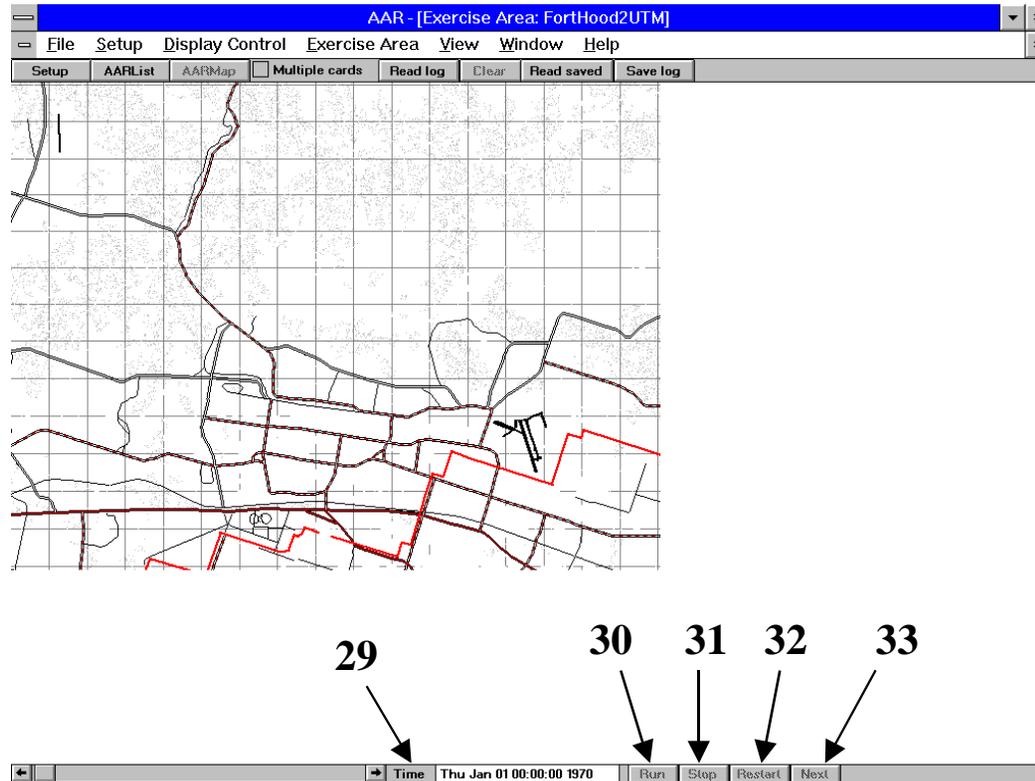
EDIT EXISTING EXERCISE AREA

- **Download exercise area to be edited from database.**
- **Adjust/input targets.**
- **Save new exercise area under a new name.**

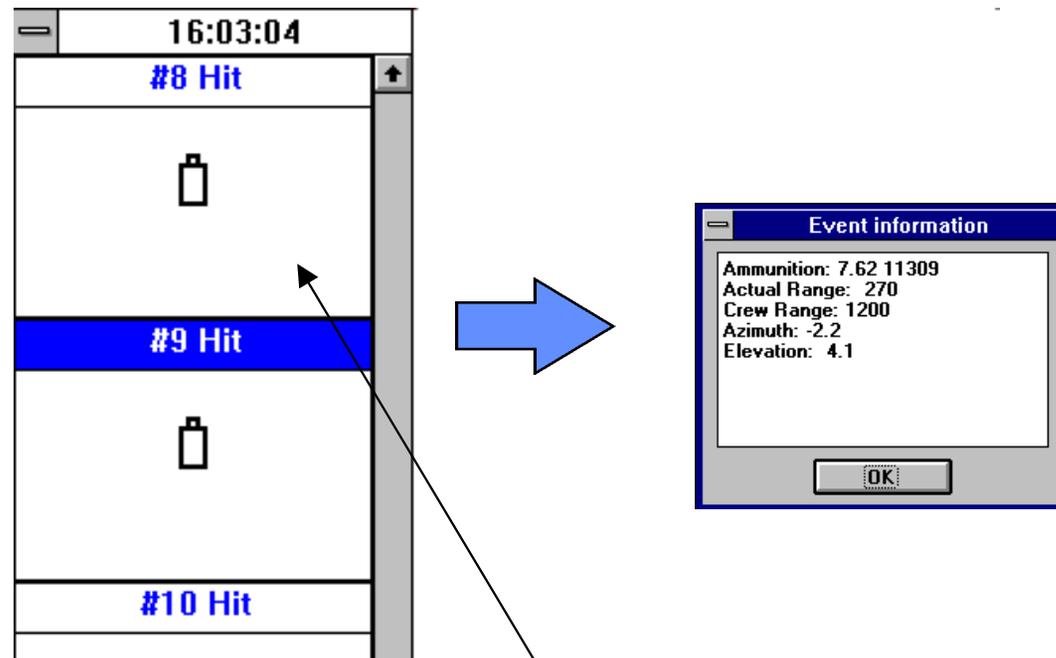
NEW UNIT DIALOG BOX



AAR MAP CONTROLS



FIRE EVENT

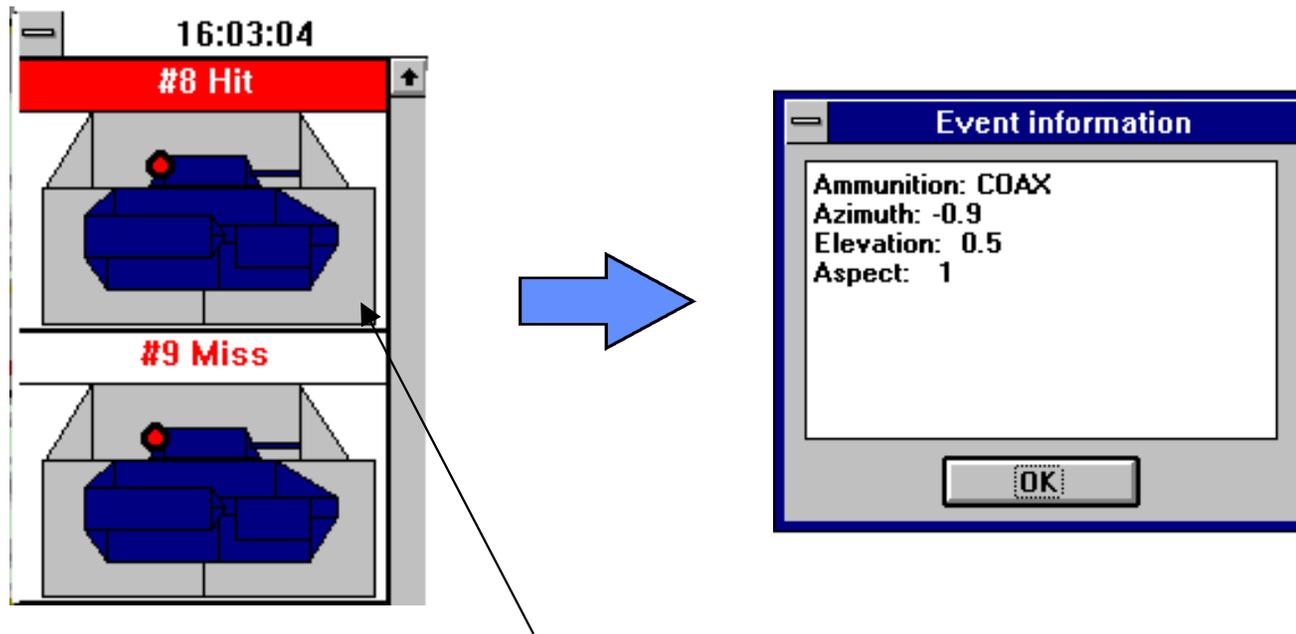


Double click on result

Note.

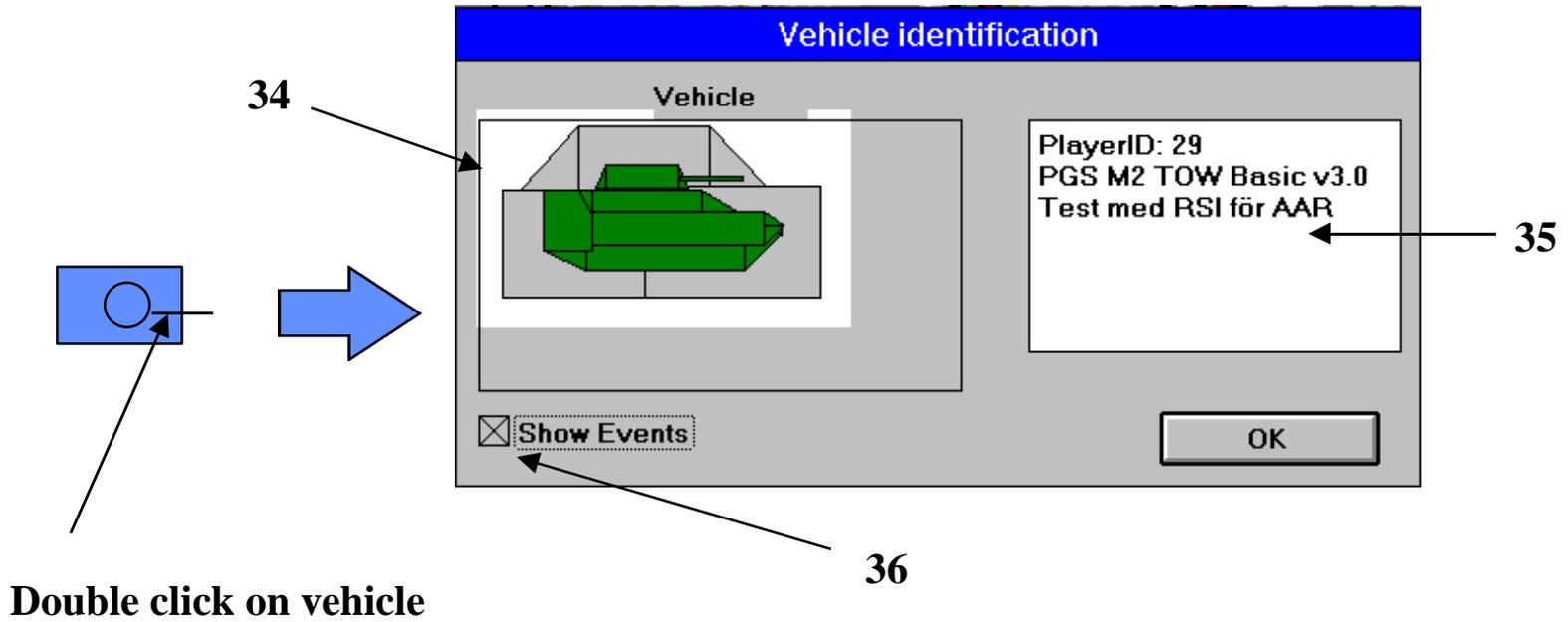
No impact points with multiple card checked (force-on-force).

TARGET EVENT



Double click on result

VEHICLE INFORMATION



CREATING A GRID MAP

- **Record conversion parameters for location.**
- **Select CREATE NEW GRID MAP.**
 - **Set size of grid.**
 - **Select number of grids.**
 - **Select UTM format for map.**
 - **Add conversion parameters.**
- **Scale map.**
- **Save exercise area to database under a new name.**
- **Add targets.**
- **Save to database.**

SUMMARY

- **AAR map controls and indicators**
- **Creation of new exercise**
- **Changes to existing exercise**
- **Evaluation of training exercise with AAR map**

CLOSING STATEMENT

- **This block of instruction has taught you to prepare and evaluate a training exercise with AAR map.**